

From one place to another

A large proportion of the activities in industry and commerce consists of moving material from one place to another. By force of habit we often do this manually or we use inappropriate equipment for assistance.

A jib crane with an electric chain hoist is often too slow and inconvenient. It cannot balance and hold the load in predetermined positions while lifting. Neither can it meet the requirements for precision.

The industrial robot or automatic manipulator is often far too expensive. The total investment of an installation of this type usually amounts to twice the basic price of the robot.

The **Ergolift/Ergobalancer** opens up many new opportunities for fast, convenient and safe handling of loads. It relieves the operator of strenuous work such as gripping, lifting, holding and turning an object and it works quickly with high precision.

Situations that would normally require at least two people can be handled with one operator and an **Ergolift/Ergobalancer**, quickly, safely and without manual strain.

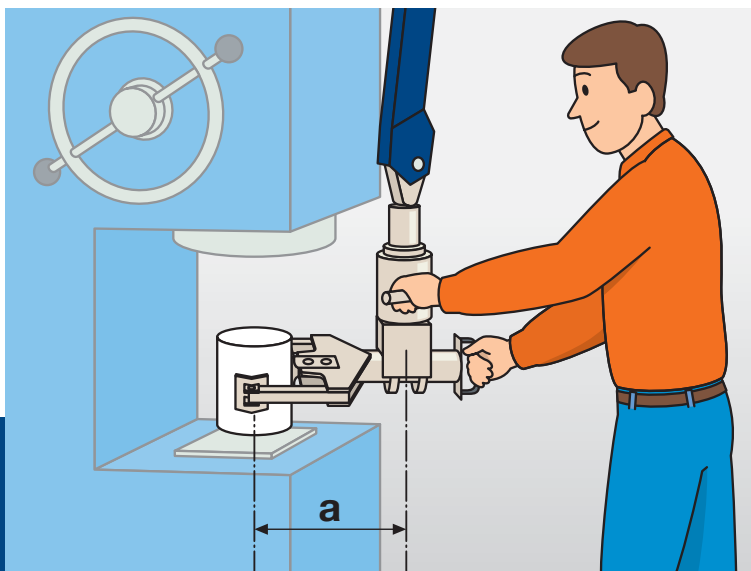
When equipped with a suitable lifting tool the **Ergolift/Ergobalancer** is a versatile and economical tool that provides the perfect solution to many handling situations.

Off-centre loads

Due to its rugged design, the **Ergolift/Ergobalancer** can withstand *high off-centre loads*. The load can be held and transported at a large distance (a) from the tool attachment (see figure). This ability to reach into and under objects makes it effective and useful for tasks that other lifting equipment cannot tackle, such as handling work pieces at presses, drilling machines, milling machines, furnaces, cabinets, conveyor systems.

One person operating the **Ergolift/Ergobalancer** can handle and balance large loads such as doors, wall elements, panels, long shafts, pipes which normally would require at least two people. And the operation is faster, smoother and safer.

Its ability to handle high off-centre loads makes the Ergolift/Ergobalancer very useful in many situations that other lifting arms in its class simply cannot handle.



Max. permissible off-centre load

$$M \max^* = G \times a \text{ Nm}$$

(see technical specification)

G = Load in Newton
a = Distance in m

*) in all directions

Tools

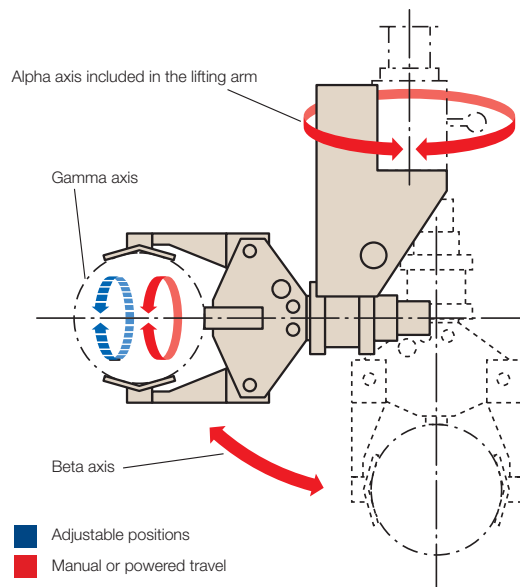
Ergolift/Ergobalancer can be equipped with a wide variety of tools. The actual design of the tool is dependent on the specific application. Typical tools include lifting hooks, lifting tongs, magnetic and suction tools and hydraulic grippers. In many cases we manufacture tools to meet customer requirements.

The **Ergogrip** gripping unit has proven to be the solution to many of the handling problems encountered by our customers. The **Ergogrip** is a hydraulic, modular gripping unit available in 2 models for goods weighing up to 200kg/600 kg. The design of the unit is shown in the figure below. The gripper is available in eleven basic versions (see page 7). The Ergogrip jaws can easily be modified to suit the handled object.

Some important benefits:

- Wide gripping range
- High gripping force
- Compact dimensions and low dead weight
- Modular design
- External and internal gripping function (option)
- High safety

For further information please request special leaflet.



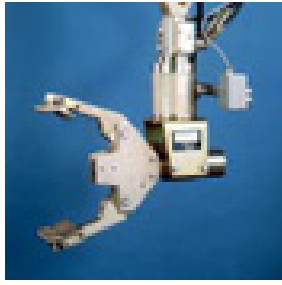
Control of the Ergogrip

The gripping unit can be controlled by means of levers or push buttons. The lever control unit is a robust and inexpensive alternative, which requires more space than the push-button unit.



Lever control unit Type VU-H

P



EGH10 Horizontal installation. With clamp mounting for stepless adjustment about the gamma axis.



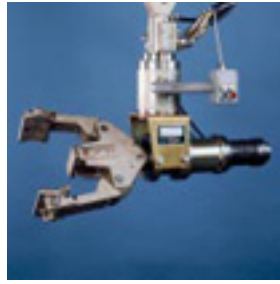
EGH20/EGH25 Vertical/sloping installation. The slope angle is adjustable in steps 0/15/30/40° about the beta axis. EGH20 With clamp mounting for stepless adjustment about the gamma axis. EGH25 Manually rotatable 340° about the gamma axis.



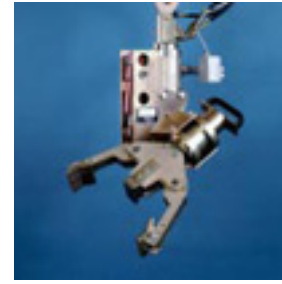
EHG22 Vertical installation. With clamp mounting for stepless adjustment about the gamma axis.



EGH30 Horizontal installation. Manually rotatable 340° about the gamma axis.



EGH40 Horizontal installation. Powered rotary travel about the gamma axis. Angular rotation 90°/180°/270°/360°.



EGH50/EGH60 Powered tilting travel of 90° about the beta axis. The gamma axis is located off-centre. EGH50 With clamp mounting for stepless adjustment about the gamma axis. EGH60 Manually rotatable 340° about the gamma axis.



EGH55/EGH65 Powered tilting travel 90° about the beta axis. Centrally located gamma axis. EGH55 With clamp mounting for stepless adjustment about the gamma axis. EGH65 Manually rotatable through an unlimited angle about the gamma axis.



EGH70 Powered tilting travel 90° about the beta axis. Gamma axis located off-centre. Powered rotary travel about the gamma axis through angles of 90°/180°/270°/360°.



Push button control unit Type VU-S



Rotation latch on EGH30/EGH60



Rotation latch for EGH25/EGH65

Ergobalancer®

Use:

Ergobalancer is a pneumatic manipulator for quick, convenient handling with high precision. **Ergobalancer** can for instance be used for loading/unloading machine tools, conveyors, assembly, palletising.

Ergobalancer can be equipped with many different tools such as pneumatic and hydraulic grippers, vacuum tools, magnets.

Function:

Ergobalancer is a manually controlled and pneumatically driven manipulator with an electronic control that automatically balances any load to a “weightless” condition. The load can conveniently be moved, quickly and with great accuracy, to any position within the operating area of the arm.

Ergobalancer has no buttons or levers and does not require adjustments for different loads. Even if the load is changed during handling it is perfectly balanced at all times. The operator can move the floating load in any direction (vertically or horizontally) simply by pushing or pulling it in the desired direction. The control is so simple and logical that anyone using it will achieve high-speed operation, safely in a matter of minutes.

Safety:

A brake prevents uncontrolled movements of the arm if the load is inadvertently lost, incorrectly handled, a failure of the control systems occurs etc. Special valves keep the arm still in the event of electrical or compressed air failure.

Design:

Ergobalancer is available in two models, type BA and type BB. The choice of model depends upon several factors such as ceiling height, reach-in/reach-under demands. Please consult us for advice.

Ergobalancer is also available with a manual balancing system where the loads are pre-set, or with a handle by which the lifting speed is steplessly regulated.

Installation:

Several methods available. See illustrations on page 10–11 for details.

Sizes:

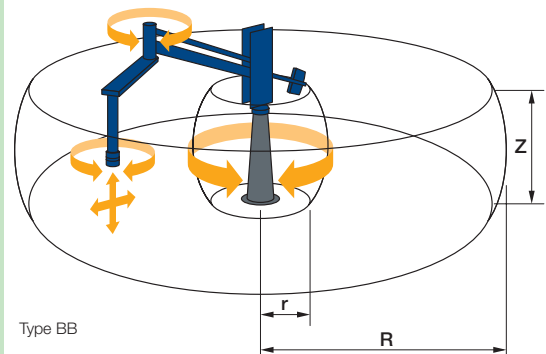
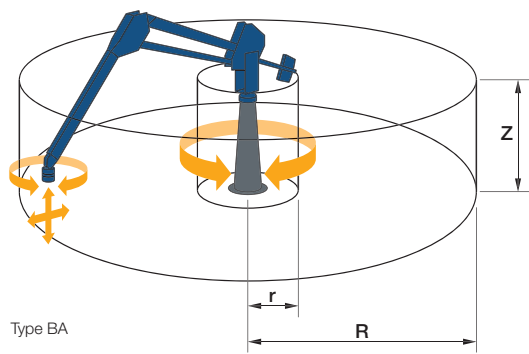
Ergobalancer is available in several standard sizes according to adjacent tables. Other sizes are quoted on request. We also produce hydraulic manipulators with lifting capacity up to 700 kg.

Supply:

Compressed air: Min 0,6 Mpa. Electricity: 400V 50 Hz.



The electronic control system of the Ergobalancer automatically balances the load so that the operator can move the load conveniently and safely simply by pushing in the desired direction.



Type	Max load kg	R	r	z
BA50	50	2700	540	1900
BA70	70	2190	440	1500
BA75	75	3000	590	2150
BA75E	75	3490	1080	2150
BA75SE	75	3990	1580	2150
BA110	110	2190	440	1500
BA110E	110	2680	920	1500
BA110SE	110	3180	1420	1500
BA150	150	3000	590	2150
BA150E	150	3490	1080	2150
BA150SE	150	3990	1580	2150
BA200	200	2380	470	1650
BA200E	200	2860	950	1650
BA200SE	200	3360	1450	1650
BA260	260	1880	380	1250
BA260E	260	2360	870	1250
BA260SE	260	2860	1370	1250

Type	Max load kg	R	r	z
BB60	60	2800	500	1600
BB90	90	2800	500	1600
BB150	150	2800	500	1600
BB240	240	2800	500	1600

Dimensions in millimeters.
The specifications are subject to change without prior notice.